

# NON-COUPPLING MAGNETIC SHIELDING COIL

## Abstract of Disclosure

In this system and method for magnetic resonance imaging, an actively shielded primary coil includes a first and second set of turns each having a prescribed number of turns about an axis, and each being symmetrically positioned radially from the axis and equidistant with respect to a mid plane perpendicular to the axis. A secondary shielding coil includes a third and fourth set of turns each having a prescribed number of turns about the axis and being symmetrically positioned radially from the axis and equidistant with respect to the mid plane. The third set of turns is positioned in close proximity to the first set of turns and outward of the first set of turns. Likewise, the fourth set of turns is positioned in close proximity to the second set of turns and outward of the second set of turns. The first and third sets of turns are in a first prescribed turns ratio and the second and fourth sets of turns are in a second prescribed turns ratio.

## Figures